

AUG 3 - 2006

PATENT

Appl. No. 10/789,159
Amdt. dated August 3, 2006
Reply to Office Action of July 3, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A method for inducing differentiation of pluripotent cells comprising the following steps (a) and (b):
 - (a) culturing the pluripotent cells in a medium comprising any one of the following growth factors (i) to (iii):
 - (i) acidic fibroblast growth factor, fibroblast growth factor 4, and hepatocyte growth factor;
 - (ii) acidic fibroblast growth factor, and growth factor(s) selected from activin A, epidermal growth factor, and β -nerve growth factor; and
 - (iii) fibroblast growth factor 4, and growth factor(s) selected from activin A and hepatocyte growth factor; and,
 - (b) culturing the cell cultured in step (a) in a medium comprising oncostatin M.
2. (Original) The method according to claim 1, wherein a gelatin-coated culture dish is used in step (a), and a collagen type I-coated culture dish or laminin-coated culture dish is used in step (b).
3. (Original) The method according to claim 1, wherein a collagen type I-coated culture dish is used.
4. (Original) A method for inducing differentiation of pluripotent cells comprising the following steps (a) and (b):
 - (a) culturing the pluripotent cells in a medium comprising at least one growth factor selected from retinoic acid, leukemia inhibitory factor, and hepatocyte growth factor; and,
 - (b) culturing the cell cultured in step (a) in a medium comprising any one of the following growth factors (i) to (iii):

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- (i) acidic fibroblast growth factor, fibroblast growth factor 4, and hepatocyte growth factor;
- (ii) acidic fibroblast growth factor, and growth factor(s) selected from activin A, epidermal growth factor and β -nerve growth factor; and
- (iii) fibroblast growth factor 4, and growth factor(s) selected from activin A and hepatocyte growth factor.

5. (Original) The method according to claim 3, wherein gelatin-coated culture dishes are used in steps (a) and (b).

6. (Original) A method for inducing differentiation of pluripotent cells comprising the following steps (a) to (c):

(a) culturing the pluripotent cells in a medium comprising at least one of the growth factors selected from retinoic acid, leukemia inhibitory factor and hepatocyte growth factor;

(b) culturing the cell cultured in step (a) in a medium comprising any one of the following growth factors (i) to (iii):

- (i) acidic fibroblast growth factor, fibroblast growth factor 4 and hepatocyte growth factor;
- (ii) acidic fibroblast growth factor, and growth factor(s) selected from activin A, epidermal growth factor and β -nerve growth factor; and
- (iii) fibroblast growth factor 4, and growth factor(s) selected from activin A and hepatocyte growth factor; and,

(c) culturing the cells cultured in step (b) in a medium comprising oncostatin M.

7. (Previously presented) The method according to claim 6, wherein gelatin-coated culture dishes are used in steps (a) and (b), and a collagen type I-coated culture dish or laminin-coated culture dish is used in step (c).

8. (Previously presented) A method according to claim 1, wherein the pluripotent cells are derived from a mammal.

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9. (Original) The method according to claim 8, wherein the mammal is a human, monkey, mouse, rat or pig.
10. (Previously presented) A method according to claim 1, wherein the pluripotent cells are embryonic stem cells, adult stem cells, mesenchymal stem cells, or umbilical cord blood cells.
11. (Previously presented) A method for producing hepatocytes, wherein the method comprises steps (a) and (b) according to claim 1, or steps (a) to (c) according to claim 6.
12. (Original) The method according to claim 11, wherein the hepatocytes are mature hepatocytes.
13. (Previously presented) The method according to claim 11, wherein the pluripotent cells are derived from a mammal.
14. (Original) The method according to claim 13, wherein the mammal is a human, monkey, mouse, rat or pig.
15. (Previously presented) A method according to claim 11, wherein the pluripotent cells are embryonic stem cells, adult stem cells, mesenchymal stem cells, or umbilical cord blood cells.
- 16-21. (Cancelled).